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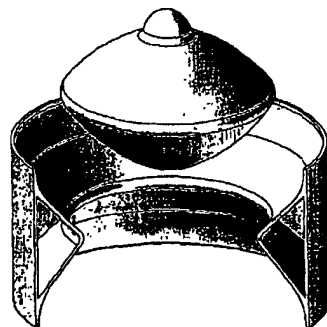
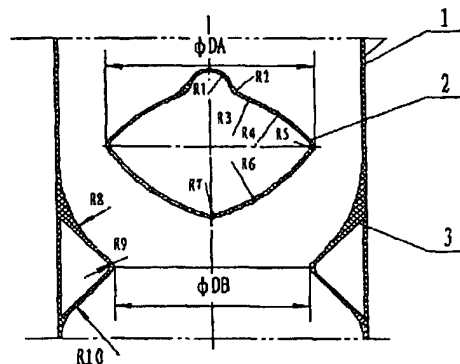
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(54) Title: A MULTIPHASE REACTOR

(54) 发明名称: 一种多相反应器



(57) Abstract: This invention relates to a multiphase reactor which is especially suitable in the desulfurization of flue gas. Inside the multiphase reactor housing fixed a rotary build-in member, which comprises an axisymmetric body and an annular axisymmetric body. The housing is cylindrical, and its surface is smooth or waved. The axisymmetric body, which is set above the annular axisymmetric body coaxially, has a maximal diameter not less than the inner diameter of the annular axisymmetric body. One rotary build-in member and its housing constitute a unit, and a multiphase reactor can have one or more such units. The multiphase reactor according to this invention could improve the liquid flow pattern sufficiently, prevent the solid deposition, make gas, liquid and solid phases contact substantially, and enhance the mass transfer velocity; and it has a simple structure, is convenient for use, especially suitable for use in environmental protection, chemical engineering, metallurgical and architectural industries. It has a rotary build-in member.

WO 2005/000451 A1

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**(57) 摘要**

本发明涉及一种多相反应器，它尤其适用于二氧化硫烟气脱硫。其内由旋转体和环型旋转体组合成的旋转体式内置构件结构固定在多相反应器壳体上。其壳体是圆筒形，圆筒的表面是光滑的或是波浪形的；其旋转体的最大直径不小于环型旋转体内环直径，旋转体在环型旋转体上方，两者是同轴的。一个旋转体式内置构件和相应的壳体构成一个单元，一个多相反应器可由一个单元构成，也可多个单元构成。本多相反应器能有效改善流体流型，固相不易沉积，气液固三相接触充分，强化传质速率，且结构简单，使用方便、适用于环保、化工、冶金、建材等行业。设置有旋转体式内置构件。